

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original): A method for preserving a catalyst comprising maintaining a phosphorus-molybdenum-vanadium catalyst containing phosphorus, molybdenum and vanadium retained in a reactor under a condition of a water content of 30 mg or less per 1 g of catalyst dry weight, before the start of the reaction or during the stop of the reaction.

2. (Original): The method for preserving a catalyst according to Claim 1, wherein a retaining temperature of said catalyst is 0 °C or higher and not higher than the calcination temperature in catalyst production.

3. (Original): The method for preserving a catalyst according to Claim 1, wherein a retaining temperature of said catalyst is 15 °C or higher and 150 °C or lower.

4. (Original): The method for preserving a catalyst according to Claim 1, wherein a water concentration in gas in said reactor is 1 vol% or less.

5. (Original): The method for preserving a catalyst according to Claim 1, wherein a water concentration in gas in said reactor is 0.5 vol% or less.

6. (Original): The method for preserving a catalyst according to Claim 1, wherein a retaining temperature of said catalyst is 0 °C or higher and not higher than the calcination temperature in catalyst production, and a water concentration in gas in said reactor is 1 vol% or less.

7. (Original): The method for preserving a catalyst according to Claim 1, wherein a retaining temperature of said catalyst is 15 °C or higher and 150 °C or lower, and a water concentration in gas in said reactor is 0.5 vol% or less.

8. (Original): The method for preserving a catalyst according to Claim 6, wherein said temperature of the catalyst is retained 0 °C or higher and not higher than the calcination temperature in catalyst production, and the gas having a water concentration of 0.8 vol% or less and containing substantially no component lowering a catalytic performance is allowed to pass through in said reactor.

9. (Original): The method for preserving a catalyst according to Claim 8, wherein the gas to be passed through in the reactor is an inert gas or oxidizing gas.

10. (Original): The method for preserving a catalyst according to Claim 9, wherein the gas to be passed through in the reactor is air.

11. (Original): The method for preserving a catalyst according to Claim 7, wherein said temperature of the catalyst is retained 15 °C or higher and 150 °C or lower, and the gas having a water concentration of 0.5 vol% or less and containing substantially no component lowering a catalytic performance is allowed to pass through in said reactor.

12. (Original): The method for preserving a catalyst according to Claim 11, wherein the gas to be passed through in the reactor is an inert gas or oxidizing gas.

13. (Original): The method for preserving a catalyst according to Claim 12, wherein the gas to be passed through in the reactor is air.

Claim 14 (Currently Amended): The method for preserving a catalyst according to Claim 1, wherein said phosphorus-molybdenum-vanadium catalyst is preserved in ~~dark ambient darkness under ambient conditions.~~

Claim 15 (Previously Presented): The method for preserving a catalyst according to Claim 1, wherein said phosphorus-molybdenum-vanadium catalyst is a catalyst used in producing methacrylic acid from methacrolein by catalytic oxidation in a vapor phase.

Claim 16 (Original): The method for preserving a catalyst according to Claim 14, wherein said phosphorus-molybdenum-vanadium catalyst is a catalyst used in producing methacrylic acid from methacrolein by catalytic oxidation in a vapor phase.

Claim 17 (Previously Presented): The method for preserving a catalyst according to Claim 15, wherein said phosphorus-molybdenum-vanadium catalyst is represented by the following formula (I):



wherein, P, Mo, V, Cu and O represent phosphorus, molybdenum, vanadium, copper and oxygen, respectively; X represents at least one element selected from the group consisting of antimony, bismuth, arsenic, germanium, zirconium, tellurium, silver, selenium, silicon, tungsten and boron; Y represents at least one element selected from the group consisting of iron, zinc, chromium, magnesium, tantalum, cobalt, manganese, barium, gallium, cerium and lanthanum; Z represents at least one element selected from the group consisting of potassium, rubidium and cesium; and a, b, c, d, e, f, g and h represent an atom ratio of each

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element, and when b=12, then, a=0.5 to 3, c=0.01 to 3, d=0.01 to 2, e=0 to 3, f=0 to 3, g=0.01 to 3; and h represents an atom ratio of oxygen necessary for satisfying an atomic valence of each component.

Claim 18 (Previously Presented): The method for preserving a catalyst according to Claim 16, wherein said phosphorus-molybdenum-vanadium catalyst is represented by the following formula (I):



wherein, P, Mo, V, Cu and O represent phosphorus, molybdenum, vanadium, copper and oxygen, respectively; X represents at least one element selected from the group consisting of antimony, bismuth, arsenic, germanium, zirconium, tellurium, silver, selenium, silicon, tungsten and boron; Y represents at least one element selected from the group consisting of iron, zinc, chromium, magnesium, tantalum, cobalt, manganese, barium, gallium, cerium and lanthanum; Z represents at least one element selected from the group consisting of potassium, rubidium and cesium; and a, b, c, d, e, f, g and h represent an atom ratio of each element, and when b=12, then, a=0.5 to 3, c=0.01 to 3, d=0.01 to 2, e=0 to 3, f=0 to 3, g=0.01 to 3; and h represents an atom ratio of oxygen necessary for satisfying an atomic valence of each component.

Claim 19 (Previously Presented): The method for preserving a catalyst according to Claim 2, wherein said phosphorus-molybdenum-vanadium catalyst is a catalyst used in producing methacrylic acid from methacrolein by catalytic oxidation in a vapor phase.

Claim 20 (Previously Presented): The method for preserving a catalyst according to Claim 4, wherein said phosphorus-molybdenum-vanadium catalyst is a catalyst used in producing methacrylic acid from methacrolein by catalytic oxidation in a vapor phase.

Claim 21 (Previously Presented): The method for preserving a catalyst according to Claim 6, wherein said phosphorus-molybdenum-vanadium catalyst is a catalyst used in producing methacrylic acid from methacrolein by catalytic oxidation in a vapor phase.

Claim 22 (Previously Presented): The method for preserving a catalyst according to Claim 7, wherein said phosphorus-molybdenum-vanadium catalyst is a catalyst used in producing methacrylic acid from methacrolein by catalytic oxidation in a vapor phase.

Claim 23 (Previously Presented): The method for preserving a catalyst according to Claim 8, wherein said phosphorus-molybdenum-vanadium catalyst is a catalyst used in producing methacrylic acid from methacrolein by catalytic oxidation in a vapor phase.

Claim 24 (Previously Presented): The method for preserving a catalyst according to Claim 19, wherein said phosphorus-molybdenum-vanadium catalyst is represented by the following formula (I):



wherein, P, Mo, V, Cu and O represent phosphorus, molybdenum, vanadium, copper and oxygen, respectively; X represents at least one element selected from the group consisting of antimony, bismuth, arsenic, germanium, zirconium, tellurium, silver, selenium, silicon, tungsten and boron; Y represents at least one element selected from the group consisting of iron, zinc, chromium, magnesium, tantalum, cobalt, manganese, barium, gallium, cerium and

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lanthanum; Z represents at least one element selected from the group consisting of potassium, rubidium and cesium; and a, b, c, d, e, f, g and h represent an atom ratio of each element, and when b=12, then, a=0.5 to 3, c=0.01 to 3, d=0.01 to 2, e=0 to 3, f=0 to 3, g=0.01 to 3, and h represents an atom ratio of oxygen necessary for satisfying an atomic valence of each component.

Claim 25 (Previously Presented): The method for preserving a catalyst according to Claim 20, wherein said phosphorus-molybdenum-vanadium catalyst is represented by the following formula (I):



wherein, P, Mo, V, Cu and represent phosphorus, molybdenum, vanadium, copper and oxygen, respectively; X represents at least one element selected from the group consisting of antimony, bismuth, arsenic, germanium, zirconium, tellurium, silver, selenium, silicon, tungsten and boron; Y represents at least one element selected from the group consisting of iron, zinc, chromium, magnesium, tantalum, cobalt, manganese, barium, gallium, cerium and lanthanum; Z represents at least one element selected from the group consisting of potassium, rubidium and cesium; and a, b, c, d, e, f, g and h represent an atom ratio of each element, and when b=12, then, a=0.5 to 3, c=0.01 to 3, d=0.01 to 2, e=0 to 3, f=0 to 3, g=0.01 to 3, and h represents an atom ratio of oxygen necessary for satisfying an atomic valence of each component.

Claim 26 (Previously Presented): The method for preserving a catalyst according to Claim 21, wherein said phosphorus-molybdenum-vanadium catalyst is represented by the

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following formula (I):



wherein, P, Mo, V, Cu and O represent phosphorus, molybdenum, vanadium, copper and oxygen, respectively; X represents at least one element selected from the group consisting of antimony, bismuth, arsenic, germanium, zirconium, tellurium, silver, selenium, silicon, tungsten and boron; Y represents at least one element selected from the group consisting of iron, zinc, chromium, magnesium, tantalum, cobalt, manganese, barium, gallium, cerium and lanthanum; Z represents at least one element selected from the group consisting of potassium, rubidium and cesium; and a, b, c, d, e, f, g and h represent an atom ratio of each element, and when b=12, then, a=0.5 to 3, c=0.01 to 3, d=0.01 to 2, e=0 to 3, f=0 to 3, g=0.01 to 3, and h represents an atom ratio of oxygen necessary for satisfying an atomic valence of each component.

Claim 27 (Previously Presented): The method for preserving a catalyst according to Claim 22, wherein said phosphorus-molybdenum-vanadium catalyst is represented by the following formula (I):



wherein, P, Mo, V, Cu and O represent phosphorus, molybdenum, vanadium, copper and oxygen, respectively, X represents at least one element selected from the group consisting of antimony, bismuth, arsenic, germanium, zirconium, tellurium, silver, selenium, silicon, tungsten and boron, Y represents at least one element selected from the group consisting of iron, zinc, chromium, magnesium, tantalum, cobalt, manganese, barium, gallium, cerium and lanthanum, Z represents at least one element selected from the group consisting of potassium,

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rubidium and cesium, a, b, c, d, e, f, g and h represent an atom ratio of each element, and when b=12, then, a=0.5 to 3, c=0.01 to 3, d=0.01 to 2, e=0 to 3, f=0 to 3, g=0.01 to 3, and h represents an atom ratio of oxygen necessary for satisfying an atomic valence of each component.

Claim 28 (Previously Presented): The method for preserving a catalyst according to Claim 23, wherein said phosphorus—molybdenum-vanadium catalyst is represented by the following formula (I):



wherein, P, Mo, V, Cu and O represent phosphorus, molybdenum, vanadium, copper and oxygen, respectively; X represents at least one element selected from the group consisting of antimony, bismuth, arsenic, germanium, zirconium, tellurium, silver, selenium, silicon, tungsten and boron; Y represents at least one element selected from the group consisting of iron, zinc, chromium, magnesium, tantalum, cobalt, manganese, barium, gallium, cerium and lanthanum; Z represents at least one element selected from the group consisting of potassium, rubidium and cesium; and a, b, c, d, e, f, g and h represent an atom ratio of each element, and when b=12, then, a=0.5 to 3, c=0.01 to 3, d=0.01 to 2, e=0 to 3, f=0 to 3, g=0.01 to 3, and h represents an atom ratio of oxygen necessary for satisfying an atomic valence of each component.